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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,863	11/13/2003	Eric John Klammer	HLC-109-B	8640

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EXAMINER

KING, BRADLEY T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,863

Applicant(s)

KLAMMER, ERIC JOHN

Examiner

Bradley T King

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 01/07/2005 is acknowledged. The traversal is on the ground(s) that the search is not burdensome. This is not found persuasive because the method requires control steps not required by the structure and further search in a different class.

The requirement is still deemed proper and is therefore made FINAL.

Claim 21 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/07/2005.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-5, 10-14, 17-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ward (US# 6505714).

Ward discloses all the limitations of the instant claims including; an electric motor; a cam 36 having a variable radius perimeter, the cam being rotatably driveable by the electric motor; a cam follower 30 engageable with the cam and operably connected to a parking brake 34, whereby the cam follower travels along the perimeter of the cam as the cam is rotated causing the cam follower to move radially outward from a center of rotation and the parking brake to be applied.

Regarding claim 4 see figure 3.

Regarding claim 13, it is inherent that the follower 30 have a bearing as broadly recited.

Regarding claim 17, note linkage 30 and or 32.

Regarding claim 18, note column 3, second paragraph.

Regarding claim 20, Ward discloses take-up sensors which provide a measurement indicative of the rotational position of the cam.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward (US#6505714).

Regarding claims 6-7, Ward discloses all the limitations of the instant claims with exception to the constant power or constant torque feature of the motor. The Examiner takes official notice that constant torque and constant power motors are well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize motors with either characteristic depending on the desired power requirements and braking forces of the brake system.

Regarding claim 19, Ward discloses all the limitations of the instant claim with exception to an isolator on the gear train. The Examiner takes official notice the gear train isolators are well known in the art and are used to prevent damage to the gear train and/or motor due to excessive forces. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an isolator in the gear train of Ward to protect the components, thereby preventing damage and increasing the durability of the brake device.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2362747 in view of WO 90/15743.

FR 23672747 discloses a brake actuator including; an electric motor 12; a cam 20 having a variable radius perimeter, the cam being rotatably driveable by the electric motor; a cam follower 2e engageable with the cam and operably connected to a brake 34, whereby the cam follower travels along the perimeter of the cam as the cam is rotated causing the cam follower to move radially outward from a center of rotation and the brake to be applied. FR 23672747 lacks the explicit disclosure of the actuator

actuating a parking brake, instead broadly disclosing a brake. WO 90/15743 disclose a similar actuator and further teach its application to a parking brake system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the actuator of FR 2362747 in a parking brake system application such as taught by WO 90/15743 as an obvious implementation of the device.

Regarding claim 2, see cable 14, 16, 19.

Regarding claims 8-9, see stop 20a and pocket 20b.

Regarding claim 13, see bearing 2e.

Regarding claim 17, note linkage 2.

Regarding claims 6-7, FR2362747 further lacks to the constant power or constant torque feature of the motor. The Examiner takes official notice that constant torque and constant power motors are well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize motors with either characteristic depending on the desired power requirements and braking forces of the brake system.

Regarding claim 19, FR 2362747 (as applied to claim 1) further lacks an isolator on the gear train. The Examiner takes official notice the gear train isolators are well known in the art and are used to prevent damage to the gear train and/or motor due to excessive forces. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an isolator in the gear train of FR 2362747 to protect the components, thereby preventing damage and increasing the durability of the brake device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4582177, JP 7-323781⁵, and US 149226. All show actuator devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

Robert A. Siconolfi
ROBERT A. SICONOLFI
PATENT EXAMINER